- 1 54. (NEW) The apparatus of claim 1 wherein the
- 2 constricted passage has a fixed cross section.
- 1 55. (NEW) The apparatus of claim 1 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a liquid seal such
- 6 that liquid in the pipette tip of the first part is forced
- 7 upward into the sample cup of the first part.
- 1 56. (NEW) The apparatus of claim 1 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a moving liquid seal
- 6 such that the moving liquid seal progresses up the pipette
- 7 tip as the pipette tip passes through the constricted
- 8 passage.
- 1 57. (NEW) The apparatus of claim 1 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a moving liquid seal
- 6 such that the moving liquid seal progresses up the pipette
- 7 tip as the pipette tip passes through the constricted
- 8 passage, wherein the moving liquid seal forces liquid in
- 9 the pipette tip upward into the sample cup.
- 1 58. (NEW) The apparatus of claim 53 wherein the pipette
- 2 tip of the first part and the constricted passage of the

- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a liquid seal such
- 6 that liquid in the pipette tip of the first part is forced
- 7 upward into the sample cup of the first part.
- 1 59. (NEW) The apparatus of claim 53 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a moving liquid seal
- 6 such that the moving liquid seal progresses up the pipette
- 7 tip as the pipette tip passes through the constricted
- 8 passage.
- l 60. (NEW) The apparatus of claim 53 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a moving liquid seal
- 6 such that the moving liquid seal progresses up the pipette
- 7 tip as the pipette tip passes through the constricted
- 8 passage, wherein the moving liquid seal forces liquid in
- 9 the pipette tip upward into the sample cup.
- 1 61. (NEW) The apparatus of claim 54 wherein the pipette
- 2 tip of the first part and the constricted passage of the
- 3 second part are designed such that, as the pipette tip
- 4 passes through the constricted passage, walls defining the
- 5 pipette tip collapse inwardly and form a liquid seal such
- 6 that liquid in the pipette tip of the first part is forced
- 7 upward into the sample cup of the first part.